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APPLICATION NO		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,184 09/03/2003		09/03/2003	Sven-Erik Carlson	H60-113 US	5172
21706	7590	01/24/2005		EXAMINER	
NOTARC 100 DUTC		ICHALOS	KREMER, MATTHEW J		
SUITE 110		OAD		ART UNIT	PAPER NUMBER
ORANGEBURG, NY 10962-2100				3736	
				DATE MAIL ED. 01/24/2004	DATE MAIL ED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicat	ion No.	Applicant(s)				
Office Action Commons	10/654,1	184	CARLSON ET AL.				
Office Action Summary	Examine	er	Art Unit				
		J Kremer	3736				
The MAILING DATE of this commu Period for Reply	nication appears on th	e cover sheet with the c	orrespondence ad	ldress			
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMUN  - Extensions of time may be available under the provisior after SIX (6) MONTHS from the mailing date of this com  - If the period for reply specified above is less than thirty If NO period for reply is specified above, the maximum is - Failure to reply within the set or extended period for rep Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	NICATION. Is of 37 CFR 1.136(a). In no e Imunication. (30) days, a reply within the sta statutory period will apply and of ly will, by statute, cause the ap	vent, however, may a reply be tin atutory minimum of thirty (30) day will expire SIX (6) MONTHS from plication to become ABANDONE	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).	y. ommunication.			
Status							
1) Responsive to communication(s) fi	led on						
2a)☐ This action is FINAL.	2b)⊠ This action is	non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-21 is/are pending in the 4a) Of the above claim(s) is/5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-21 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restr	are withdrawn from co						
Application Papers							
9) The specification is objected to by to the specification is objected to by the specific transfer of	e: a) accepted or bection to the drawing(s)  g the correction is requ	be held in abeyance. Secured if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 C				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some color None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review  3) Information Disclosure Statement(s) (PTO-1449 of Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate	O-152)			

#### **DETAILED ACTION**

### Claim Objections

1. Claims 1, 11, and 20-21 are objected to because of the following informalities. In claim 1, line 8, "opt1cal Signalto-Noise" should be "optical Signal-to-Noise". In regard to claim 11, line 2, "." should be deleted. In claim 20, line 5, "ref1ected" should be "reflected". In claim 21, line 2, "which" should be "with". Appropriate correction is required.

### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

3. Claims 17 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is unclear because it is unclear if "including" is being used as part of the preamble of the claim or a transitional phrase. If "including" is meant to be part of the preamble, the claim is also unclear since there is no listing of claim elements and one with ordinary skill in the art would not be able to ascertain the scope of the claim without a listing of elements.

Claim 21 provides for the use of "the configuration of claim 1", but, since the claim does not set forth any steps involved in the method/process, it is unclear what

method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

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Claim 21 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-6, 7-14, and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,348,003 to Caro. Caro teaches a light source 123, two light receivers 112 and 141, and means to increase the optical signal to noise ratio by using modulator 202. (Figs. 2-3 of Caro). In regard to claims 2-3, a beam-shaping element 117, which can expand, compress or focus the beam, is disclosed. (Fig. 1 of Caro). In regard to claims 4 and 18, Caro teaches the use of LEDs 136 (Fig. 4 of Caro), beam-shaping element 137 (Fig. 4 of Caro), beam-shaping element 117 (Fig. 1 of

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Caro), and photodetecting elements 304 (Fig. 5 of Caro). In regard to claims 5-6 and 8-9, Caro teaches LEDs 136 (Fig. 4 of Caro), photodetecting elements 304 (Fig. 5 of Caro), and optical filters (column 10, lines 41-56 of Caro). In regard to claim 7, the detectors are sensitive to the frequency of the light. (column 11 lines 28-32 of Caro). In regard to claim 10, Caro teaches a modulator 202. (Figs. 3-4 of Caro). In regard to claims 11-13, Caro teaches that the modulation can be between anywhere from 1 MHz to 500 MHz. In regard to claim 14, Caro teaches a mechanical fixing means 101. (Fig. 1 of Caro). In regard to claims 16 and 19, Caro teaches that the device is a pulsoximetric sensor. (column 17, lines 3-16 and column 4, lines 38-47 of Caro). In regard to claims 20-21, Caro teaches the use of LEDs 136 (Fig. 4 of Caro), photodetecting elements 304 (Fig. 5 of Caro), a modulator 202 (Figs. 3-4 of Caro) wherein the modulation can be between anywhere from 1 MHz to 500 MHz (column 9, lines 13-26 of Caro), reverse phase shifting and modulation (column 11, lines 29-44 of Caro), and that the device is a pulsoximetric sensor (column 17, lines 3-16 and column 4, lines 38-47 of Caro).

6. Claims 1, 10-13, 17, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,800,348 to Kaestle. In regard to claims 1, 10, and 20, Kaestle teaches a light source 33 and 34, a light receiver 35, and means to increase the optical signal to noise ratio by using modulation. (Fig. 6 and Abstract of Kaestle). In regard to claims 11-13 and 20, Kaestle teaches that the modulation frequency is 275 Hz. (column 10, lines 11-13 of Kaestle). In regard to claims 17 and 21, Kaestle teaches the senor is a pulse oximeter sensor. (Title of Kaestle).

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### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,348,003 to Caro as applied to claim 14, and further in view of U.S. Patent 4,321,930 to Jobsis et al. (Jobsis). Caro teaches a light source in the form of an optical fiber 116 connected to a clip assembly 101. (Fig. 1 of Caro). Caro does not teach how the optical fiber is connected to the clip assembly. Jobsis teaches that the optical fibers are connected to threaded fittings so that the optical fibers can be connected to attachment assemblies. (column 9, lines 63-66 of Jobsis). Such a teaching would allow the optical fiber to be connected to the clip assembly as required by Caro. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the threaded fittings as disclosed by Jobsis in the invention of Caro since Caro requires a way of attaching the optical fibers to an attachment assembly and Jobsis teaches one such way.
- 9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,348,003 to Caro in view of U.S. Patent 4,321,930 to Jobsis et al. (Jobsis) as

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applied to claim 15, and further in view of U.S. Patent 4,685,464 to Goldberger et al. (Goldberger). The combination teaches that the clip assembly can use hinges and pivots. (column 6, line 64 to column 7, lines 7 of Caro). Goldberger teaches a hinge and pivot (Fig. 2 of Goldberger) that would fulfill the requirements set forth in the combination. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the hinge and pivot of Goldberger in the combination since Caro teaches that hinges and pivots can be used and Goldberger teaches such hinges and pivots.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J Kremer whose telephone number is 571-272-4727. The examiner can normally be reached on Mon. through Fri. between 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Kremer Assistant Examiner

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